

# Up and away

For anyone working with lifts, elevators and escalators, legislation is all too familiar. Or is it? Brian Wall has been finding out



The many faces of lifting plant and equipment: engineers and managers need to brush up on legislation, regulation and guidelines to ensure safe and efficient operation

**B**ad news travels fast, as the saying goes – but not so with rules and regulations. Apparently, somewhere in the region of one third of small businesses in the UK have still not heard of the PUWER (Provision and Use of Work Equipment Regulations 1998) legislation – even though it has been in force now for almost a decade.

“This is clearly a failing that needs to be addressed,” says Mark Smailes, appointed by the European Chamber of Commerce to provide training on CE (Conformité Européene) marking directives. “Especially as PUWER’98 relates to the safe use of such equipment, where consideration needs to be given to the nature and degree of risk associated with the equipment and its use, and the means available to reduce the risk.”

By way of compliance, Smailes recommends that five essential safety steps are carried out: locate potential hazards; assess who could be injured by these and how; decide whether further precautions should be put in place; make a record of the risk assessments carried out; and review the assessments and revise them, if necessary.

Similarly, LOLER (Lifting Operations and Lifting Equipment Regulations, 1998) requires the planning, supervision and execution of lifting equipment to ensure its safety. It also requires management to ensure the safe operation of such equipment when in use, and insists on periodic, thorough examination by a competent person or persons.

According to the HSE, in general the regulations require that lifting equipment provided for use at work is: strong and stable enough for the particular use and marked to indicate safe working loads; positioned and installed to minimise any risks; used safely (ie, the work is planned, organised and performed by competent people); and subject to ongoing thorough examination and – again where appropriate – inspection by competent people.

Importantly, the HSE is now requesting views on a proposal to merge LOLER and PUWER, in order to reduce the administrative and cost burden of carrying out thorough examinations and inspections of equipment, which currently requires separate records to be maintained.

## Safety concerns

Moving on specifically to passenger lifts, it is two years since SAFed – the Safety Assessment Federation – introduced a new version of its ‘supplementary examinations’ for lift inspections. These are typically completed by a single engineer surveyor, carrying out a visual examination, and are backed by additional ‘supplementary investigations’ that, since 1998, have met the standards laid out in SAFed document LG-1. As Matt Ingleton, divisional director of vertical transportation at Hilson Moran, says, that document was widely accepted across the industry. “Its simple concept of annual, five-year and 10-year examinations for electric traction and hydraulic lifts had been well understood and was

straightforward to implement," he observes.

Then, in March 2006, SAFed revealed a new version of LG-1 – one that placed a greater emphasis on the role of the competent person, who is often the insurance inspector. The new recommendations are split into 22 separate tests, covering all elements of a lift, from hoisting machines to door interlocks. However, since the changes, Ingleton is concerned that safety might be being compromised.

"The format does not allow for the maintenance contractor to predict which elements need to be tested, but instead requires the competent person to define which of the supplementary examinations should be undertaken and when," he points out. "This approach also has the distinct disadvantage of placing a substantial burden on the insurance companies, who are now required to review the inspection regime for all of the lifts they cover. Yet, since the launch of the new tests, we have heard of very few requesting specific inspections under the new guidance notes."

### Riding the storm

Ingleton explains that there are two approaches with building owners and consultants. "One has been to continue with the old inspections, either because they were already included in existing maintenance contracts, or simply to be seen to be carrying out routine examinations. This approach has the advantage of providing some cost certainty, but should only be undertaken after advising the insurer of the plan of action.

"Others have followed directly the – apparent – advice from SAFed and the insurance companies, and, in the absence of specific requests for supplementary examinations from their insurance companies, have carried out no additional tests at all. This places a burden on the lift maintenance contractor under their duty of care."

The bottom line: Ingleton is concerned that we now have a new set of inspections that do not appear to be widely used. "This is saving the building owner money in the short term, but many observers fear that the level of safety under the old regime has been compromised," he insists.

From the near non-existent take-up of the new tests, no one can say whether the new regime is superior to the old, he adds. So continuing with the old regime until more specific advice is obtained from insurance companies would appear to be the most prudent approach.

"It certainly will not result in a reduction in the level of safety of lift equipment while the industry awaits either the proper utilisation of the new tests

or, alternatively, their abandonment," says Ingleton.

Meanwhile, recent technical developments in lift, escalator and elevator manufacture have ensured great strides forward, in terms of ride quality and energy efficiency – reducing running costs and stepping up environmental performance. Further enhancements have also been implemented to meet the specific needs of recent legislation such as the Disability Discrimination Act.

However, such benefits need to be maintained throughout the life of the installation through regular planned and preventive maintenance, says Ian Bowers, maintenance services group director, Pickerings Lifts.

From the various standpoints of safety, operational efficiency and regulatory compliance, Pickerings recommends a regular programme of preventative maintenance. "For passenger lifts, this would include between six and 12 visits annually, depending upon usage and criticality to the business. Similarly, in the case of non-passenger lifts, this would typically involve between four and eight visits – though, again, monthly maintenance is not unusual."

Most companies recognise the importance of regular maintenance visits, adds Bowers. "However, many service providers limit such visits to barely 15 minutes, checking little more than the motor room, lift car ride and floor levels."

By contrast, a Pickerings' maintenance visit will typically last between one and one and a half hours, covering such aspects as oil levels, door gears and overload switches.

In selecting a suitably qualified service provider, consistency of delivery and support are also important, he suggests. Pickerings, for example, operates a nationwide network of maintenance and repair engineers, while its in-house designed and built service management systems provide integration with customers' own computer systems, as well as real-time management information. **PE**



## Pointers

- Locate potential hazards
- Assess who could be injured by these and how
- Decide whether further precautions should be taken
- Make a record of the risk assessments carried out
- Review the assessments and revise them, if required
- Employ strong lifting equipment, stable enough for the usage, marked to indicate safe working loads
- Position and install plant to minimise risks
- Use plant safely (ie, the work is planned, organised and performed by competent people)
- Subject plant to thorough examination and inspection by competent persons



**Regular preventative maintenance is key to ensuring safety and efficiency: not just mandatory inspections and thorough examinations by competent persons**